		Pushing the Er	nvelope
		2005 Mathen	
		Core Curric	ulum
New York Mathemati	CS		
Grade 5	01-1-	Otom do malo	
Activity/Lesson	State	Standards	Otrodonto villoro e vesta ta vica va accione ta
I links and a fine time.			Students will use units to give meaning to
History of Aviation	NIX	NAA 5 5 NA 7	measurements. Calculate elapsed time in hours
Propulsion (pgs. 5-9)	NY	MA.5.5.M.7	and minutes
Types of Engines (Substitute assigned values into variable
Types of Engines (NY	MA.5.5.A.3	expressions and evaluate using order of operations
pgs. 11-23)	INT	IVIA.3.3.A.3	Students will perform algebraic procedures
Types of Engines (accurately. Evaluate the perimeter formula for
	NY	MA.5.5.A.6	given input values
pgs. 11-23)	INI	IVIA.3.3.A.0	Substitute assigned values into variable
Chemistry (pgs. 25-			expressions and evaluate using order of
41)	NY	MA.5.5.A.3	operations
41)	INI	IVIA.J.J.A.J	Students will perform algebraic procedures
Chemistry (pgs. 25-			accurately. Evaluate the perimeter formula for
41)	NY	MA.5.5.A.6	given input values
71)		1717 1.0.0.7 1.0	Students will understand numbers, multiple
			ways of representing numbers, relationships
Physics and Math			among numbers, and number systems.
(pgs. 43-63)	NY	MA.5.5.N.6	Understand the concept of ratio
(F3-1-1-1)			Students will understand numbers, multiple
			ways of representing numbers, relationships
Physics and Math			among numbers, and number systems. Express
(pgs. 43-63)	NY	MA.5.5.N.7	ratios in different forms
			Define and use appropriate terminology when
Physics and Math			referring to constants, variables, and algebraic
(pgs. 43-63)	NY	MA.5.5.A.1	expressions
			Substitute assigned values into variable
Physics and Math			expressions and evaluate using order of
(pgs. 43-63)	NY	MA.5.5.A.3	operations
			Students will perform algebraic procedures
Physics and Math			accurately. Evaluate the perimeter formula for
(pgs. 43-63)	NY	MA.5.5.A.6	given input values
		D	
		Pushing the E	
		2005 Mathen Core Curric	
New York Mathemati		Core Curric	uiuiii
Grade 6	Lo		
Activity/Lesson	State	Standards	
Activity/Lesson	Jiaie	Gtanuarus	Use substitution to evaluate algebraic
Types of Engines (expressions (may include exponents of one, two
pgs. 11-23)	NY	MA.6.6.A.2	and three)
pg0. 11 20)	111	1717 1.0.0.71.2	Evaluate formulas for given input values
Types of Engines ((circumference, area, volume, distance,
pgs. 11-23)	NY	MA.6.6.A.6	temperature, interest, etc.)
Pgc. 11 20)	1.4.1	IVI/ 1.0.0./1.0	romporatoro, intoroot, etc.)

			Use substitution to evaluate algebraic
Chemistry (pgs. 25-			expressions (may include exponents of one, two
41)	NY	MA.6.6.A.2	and three)
11)		107 (.0.0.7 (.2	Evaluate formulas for given input values
Chemistry (pgs. 25-			(circumference, area, volume, distance,
41)	NY	MA.6.6.A.6	temperature, interest, etc.)
Chemistry (pgs. 25-		1717 (.0.0.3 (.0	Measure capacity and calculate volume of a
41)	NY	MA.6.6.M.1	rectangular prism
Chemistry (pgs. 25-		1017 (.0.0.101.1	Estimate volume, area, and circumference (see
41)	NY	MA.6.6.M.7	figures identified in geometry strand)
Physics and Math		1017 (.0.0.101.17	
(pgs. 43-63)	NY	MA.6.6.N.7	Express equivalent ratios as a proportion
Physics and Math		1017 (.0.0.14.7	Express equivalent ratios as a proportion
(pgs. 43-63)	NY	MA.6.6.N.8	Distinguish the difference between rate and ratio
(pgs. 40 00)		1717 (.0.0.14.0	Use substitution to evaluate algebraic
Physics and Math			expressions (may include exponents of one, two
(pgs. 43-63)	NY	MA.6.6.A.2	and three)
(pgs. 40-00)		W/A.O.O.A.Z	Evaluate formulas for given input values
Physics and Math			(circumference, area, volume, distance,
(pgs. 43-63)	NY	MA.6.6.A.6	temperature, interest, etc.)
(pgs. 45-65)	INI	Ινιλ.υ.υ.λ.υ	Evaluate formulas for given input values
Rocket Activity (pgs.			(circumference, area, volume, distance,
69-75)	NY	MA.6.6.A.6	temperature, interest, etc.)
09-13)	INI	Ινιλ.υ.υ.λ.υ	temperature, interest, etc.)
		Pushing the En	velone
		2005 Mathem	
		Core Curricu	
New York Mathemat	ics		
Grade 7			
Activity/Lesson	State	Standards	
Types of Engines (Evaluate formulas for given input values
pgs. 11-23)	NY	MA.7.7.A.6	(surface area, rate, and density problems)
Types of Engines (
pgs. 11-23)	NY	MA.7.7.M.3	Identify customary and metric units of mass
,			Students will determine what can be measured
Types of Engines (and how, using appropriate methods and
pgs. 11-23)	NY	MA.7.7.M.4	formulas. Convert mass within a given system
Types of Engines (Determine the tool and technique to measure
pgs. 11-23)	NY	MA.7.7.M.9	with an appropriate level of precision: mass
Types of Engines (Determine personal references for customary
pgs. 11-23)	NY	MA.7.7.M.12	/metric units of mass
Types of Engines (Justify the reasonableness of the mass of an
pgs. 11-23)	NY	MA.7.7.M.13	object
Chemistry (pgs. 25-	1		Evaluate formulas for given input values
41)	NY	MA.7.7.A.6	(surface area, rate, and density problems)
· · /	1		Students will determine what can be measured
			and how, using appropriate methods and
Chemistry (pgs. 25-			formulas. Convert capacities and volumes within
41)	NY	MA.7.7.M.2	a given system
•••	1 1	1717 1.1 .1 .171.2	Solve multi-step equations by combining like
Physics and Math			terms, using the distributive property, or moving
(pgs. 43-63)	NY	MA.7.7.A.4	variables to one side of the equation
(pgs. 1 0-00)	[1 N 1	IVI/\tau.	variables to one side of the equation

Dhusian and Math			Evelvete femandae for since insutualiza
Physics and Math	NIX	NAA 7 7 A O	Evaluate formulas for given input values
(pgs. 43-63)	NY	MA.7.7.A.6	(surface area, rate, and density problems)
Physics and Math			Write an equation to represent a function from a
(pgs. 43-63)	NY	MA.7.7.A.10	table of values
Rocket Activity (pgs.			Evaluate formulas for given input values
69-75)	NY	MA.7.7.A.6	(surface area, rate, and density problems)
		Pushing the En	
		2005 Mathem	
		Core Curricu	ılum
New York Mathemat	ics		
Grade 8			
Activity/Lesson	State	Standards	
			Solve linear inequalities by combining like terms,
			using the distributive property, or moving
			variables to one side of the inequality (include
Physics and Math			multiplication or division of inequalities by a
(pgs. 43-63)	NY	MA.8.8.A.14	negative number)
Physics and Math			Interpret multiple representations using
(pgs. 43-63)	NY	MA.8.8.A.19	equation, table of values, and graph
			Determine the slope of a line from a graph and
Physics and Math			explain the meaning of slope as a constant rate
(pgs. 43-63)	NY	MA.8.8.G.13	of change
(I- D)			
		Pushing the En	velope
		2005 Mathem	
		Core Curricu	
New York Mathemat	ics		
Grades 9-12 (Algebr			
Activity/Lesson	State	Standards	
			Use mathematical representations to
			communicate with appropriate accuracy,
			including numerical tables, formulas, functions,
Types of Engines (equations, charts, graphs, Venn diagrams, and
pgs. 11-23)	NY	MA 9-12 A CM	.2 other diagrams
pgo. 11 20)	111	100 120 120	Use mathematical representations to
			communicate with appropriate accuracy,
			including numerical tables, formulas, functions,
Chemistry (pgs. 25-			equations, charts, graphs, Venn diagrams, and
41)	NY	MA Q 12 A CM	.2 other diagrams
41)	INI	IVIA.9-12.A.CIVI	Use mathematical representations to
			communicate with appropriate accuracy,
Dhyaiga ar d Matta			including numerical tables, formulas, functions,
Physics and Math	NIX	NAA O 40 A ONA	equations, charts, graphs, Venn diagrams, and
(pgs. 43-63)	NY	IVIA.9-12.A.CM	.2 other diagrams
Physics and Math	NDC	B44 0 40 4 4 4	Find values of a variable for which an algebraic
(pgs. 43-63)	NY	MA.9-12.A.A.1	fraction is undefined
Physics and Math	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
(pgs. 43-63)	NY	MA.9-12.A.A.2	Solve literal equations for a given variable
Physics and Math			Explain slope as a rate of change between
(pgs. 43-63)	NY	MA.9-12.A.A.3	2 dependent and independent variables

Rocket Activity (pgs. 69-75)	NY	MA.9-12.A.CM.2	Use mathematical representations to communicate with appropriate accuracy, including numerical tables, formulas, functions, equations, charts, graphs, Venn diagrams, and other diagrams
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